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Record U.S. Farm Exports

Coffee Rust In Brazil

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This week's cover:

Loading coffee in Paranagua, Brazil. Coffee rust has been found in major Brazilian coffee-producing States and is expected to spread. This could affect production and exports. See story beginning page 6.

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U.S. FARM EXPORTS SET NEW RECORD

Tobacco, cotton, and oilseeds lead July-March sales to new highs, offsetting some declines in grains

By DEWAIN H. RAHE
Foreign Demand and Competition Division
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Despite crippling dock strikes, sales of U.S. farm products abroad in the first 9 months of the 1971-72 year topped the previous year's record by 1 percent. Shipments during July 1971-March 1972 reached $5.97 billion, compared with $5.89 billion in the same period last year. The overall gain stemmed from increases in cotton, tobacco, soybeans, soybean meal, dairy products, cattle hides, fruits, nuts, and vegetables. Of the major commodities, only grains, flaxseed, soybean oil, alfalfa meal, and lard showed declines.

Higher prices accounted for the overall value increases. The aggregate export price index was up 3 percent during July-March from the same period a year earlier. Prices for cotton, tobacco, soybeans, soybean meal, cattle hides, and meats rose substantially. The export value of wheat averaged 5 cents a bushel higher than last year, mainly because a better quality wheat was exported this year. In July 1970-March 1971, high prices for feedgrains stimulated exports of lower cost wheat for feed.

Farm exports benefited from several recent international developments. First, world supplies of cotton, butter, oilseeds, and protein meal have been relatively tight and the United States was the only available source from which extra supplies could be put into world trade. Second, the devaluation of the dollar and the appreciation of some foreign currencies reduced prices in terms of foreign currencies from 8 to 16 percent for some major trading partners and thus improved the competitive position of many U.S. farm products. And third, a sharp reduction in Argentine corn production and larger purchases of U.S. corn by the USSR helped U.S. feedgrain sales.

On the other hand, some farm exports have been injured by major longshoremen's strikes. The west coast ports were shut down from July 1 through October 6 and again from January 17 through February 20. Farm exports were about $199 million below the $1.015 billion shipped during these same months in 1970-71. Shipments through east coast and gulf ports dipped sharply during that strike, which lasted from October 1 through November 27.

However, west gulf ports remained open during most of this period and some Atlantic and east gulf ports were open part of the time. This, together with the fact that the St. Lawrence Seaway was in operation, helped to offset some of the adverse impact of the strikes.

ORT T NEW RECORD

The adverse effects of the strikes were evident, however, in the 14-percent reduction in U.S. exports to Japan. For example, shipments of wheat were off 34 percent. The strikes also contributed significantly to a 39-percent drop in exports of alfalfa meal.

Other factors which reduced the Japanese demand for U.S. grains were increased competition from other coarse grain suppliers and the use by Japan of 1.5 million tons of surplus rice for feed.

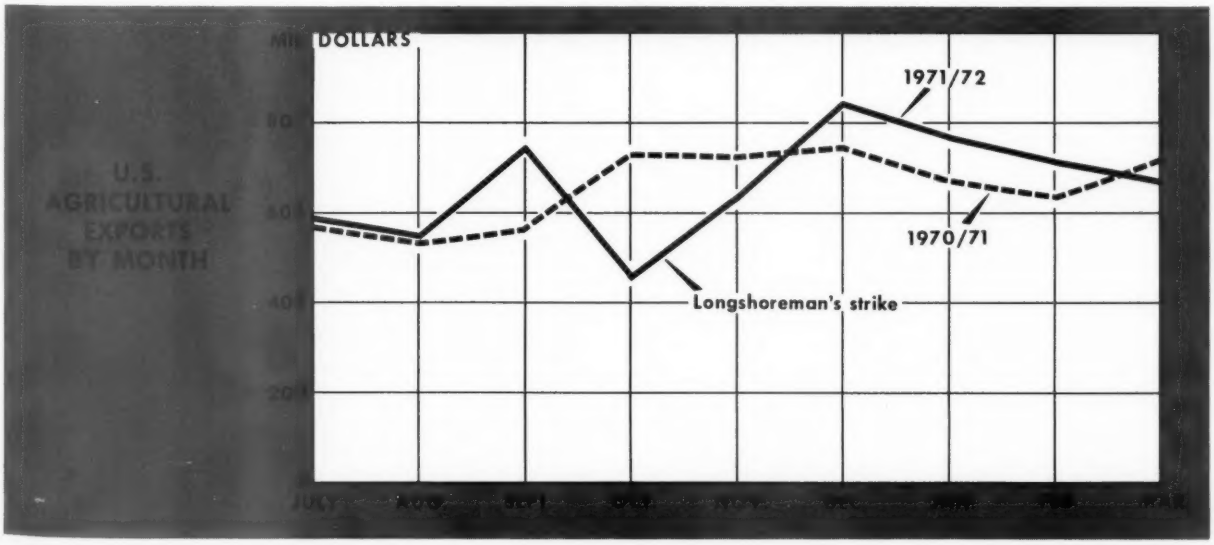
While exports to Japan fell, those to the European Community (EC) rose 5 percent because of stepped-up shipments of commodities not subject to the variable-levy system of the Common Agricultural Policy (CAP). Shipments to the EC of commodities subject to the CAP did not benefit from changes in currency values because the levying of a compensatory tax wiped out the advantages of devaluation and revaluation. Thus, exports of variable-levy items fell by 15 percent, led by a sharp drop in shipments of wheat and rice.

Feedgrain exports to the EC remained about the same as last year (5 million tons), despite a substantial rise in coarse grain output in the EC. Smaller root and forage crops and larger livestock herds stimulated demand for more feedgrains. In addition, there was a substantial gain in U.S. sales of soybeans and soybean meal, which are not in the variable-levy category, as well as increases in exports of cotton, hops, and variety meats.

Exports to the United Kingdom fell by one-tenth to $342 million. Although tobacco exports declined by $16 million, wheat exports were off 61 percent. Exports of lard and tallow also fell sharply because of the improved animal fat situation in Western Europe. Butter sales, on the other hand, jumped to $43 million from nothing in July 1970-March 1971.

Tobacco. Despite the drop in sales to the United Kingdom, U.S. tobacco exports climbed 7 percent to $471 million, with Japan and the EC accounting for most of the gain. Other gains were made in Thailand, Denmark, Taiwan, and South Vietnam. Although flue-cured tobacco accounted for the bulk of exports, the increases occurred in burley, dark-fired, and Maryland tobaccos. Prior to December, tobacco shipments were down 10 percent because of the shutdown of ports during October and November. Thus, the increase in exports was the result of record shipments in January and February. Many European countries are limiting their purchases to current needs because of the uncertainty of Rhodesia's future role as a tobacco exporter.

Cotton. U.S. exports rose to $432 million—27 percent above a year ago. Nearly all the value increase stemmed from higher prices; the export value per running bale jumped to $157, from $130 in July 1970-March 1971. Foreign free world production in 1970 was down sharply, while consumption was up in both Communist and non-Communist countries. Strong world demand for cotton has helped U.S. exports despite tight supplies and relatively high prices. U.S. cotton sales increased to Japan, Canada, Indonesia, Taiwan, the EC, Romania, the United Kingdom, Poland, Spain, the Philippines, and Switzerland. Only exports to Hong Kong were lower than a year ago. U.S. exports were unusually large during April-June 1971.



For the remainder of 1971-72, U.S. exports are expected to be relatively small because U.S. supplies now are tight. Larger crops are expected in the 1971-72 season in Pakistan, Brazil, India, Turkey, Mexico, and Central America.

Oilseeds and products. Exports rose by 8 percent in July-March to $1.67 billion. About two-thirds of the overall gain resulted from higher prices. The 1971-72 export value of soybeans averaged $3.17 per bushel, compared with $2.96 in 1970-71; soybean meal averaged $89 a ton, compared with $87; and soybean oil averaged 15 cents a pound compared with 14 cents. Foreign demand for U.S. soybeans advanced despite greater production of copra, palm oil, and rapeseed. A substantial part of the greater demand derives from the meal component of soybeans. Foreign free world crushing capacity has expanded sharply since the mid-1960's, and world trade in meal has increased about 8 percent annually since 1960, reflecting the substantial rise in livestock production and modernization of feeding practices in Western Europe and Japan. Livestock output also has been expanding in developing countries.

U.S. exports of soybeans were up to $1.05 billion from $967 million a year earlier. The volume was about 5 million bushels above last year's total and included increases in exports to the EC, Japan, Spain, and Israel.

Exports of cottonseed and soybean oils totaled $214 million, up from $208 million, with cottonseed oil accounting for all of the increase. Exports of soybean oil dropped about 124 million pounds from last year's 1.2 billion. Cottonseed oil shipments to the EC were up significantly because of larger U.S. supplies. Europeans prefer cottonseed oil when supplies are available and prices are competitive with other vegetable oils. About 41 percent of U.S. soybean oil moved under Government-financed programs. Although continued tight world supplies of fats and oils have spurred U.S. exports in the past 2 years, expanded production of vegetable oils in the foreign free world may slow U.S. sales in the coming months.

Exports of protein meal—primarily soybean meal—rose 7 percent to $316 million. Although a major share of U.S. soybean meal exports move to Western Europe, Canada also is a large market. Exports to Eastern Europe fell about 100,000 tons this year because of increased competition from fishmeal. Production of fishmeal in Peru, the major producer and exporter, is expected to total 1.98 million tons in 1972, compared with 1.4 million last year.

Grains. Exports of wheat and products moved briskly through September before the strikes. Since then, they have dipped sharply, totaling only 441 million bushels for the July-March period, one-fifth below the 558 million exported in the same months of 1970-71. Exports to Japan have plunged to 54 million bushels from 84 million. Exports also were down to principal developing countries of Taiwan, Korea, Angola, the Philippines, Brazil, Tunisia, India, Nigeria, Turkey, and Yugoslavia. However, sales rose to Afghanistan, Iran, and Peru. About 97 million bushels moved through west coast ports compared with 169 million a year earlier. The strikes have been the main reason for the sharp drop in shipments moving through west coast ports. Shipments through the gulf ports totaled 253 million bushels, down from 286 million in 1970-71. The gulf ports, the main ports of exportation for U.S. wheat, accounted for about 63 percent of all U.S. wheat shipments in July-March. Wheat exports through the St. Lawrence Seaway, which totaled 38 million bushels, were somewhat lower than a year earlier. The average value of exports rose to $1.68 a bushel from $1.63 in 1970-71. In the July 1970-March 1971 period, low-priced wheat, usable for feed, accounted for a large part of total U.S. exports and was the major reason for the relatively low unit value that year. This year, because of a sharp decline in world feedgrain prices, less of such wheat is being shipped by the United States.

Rice exports totaled 25.9 million bags, down from 27.6 million in 1970-71. Sales to the EC fell sharply because of increased competition from Latin America and Asia. Rice production is up substantially in India, Indonesia, and many other developing countries causing demand for U.S. rice to drop off sharply. However, U.S. exports for the remainder of this year are expected to pick up considerably as more rice is scheduled to go to Korea, Indonesia, South Vietnam, and Bangladesh.

Feedgrain exports of 14.5 million tons were 10 percent below last year's level. A drop of more than 2 million tons in shipments to Japan more than accounted for the decline. This year Japan has bought more of its feedgrains from other sources—mainly South Africa, Thailand, and Australia. Also, under the program to reduce its rice surplus, Japan allocated about 1.5 million tons of surplus rice to mixed feed. Exports to the EC were about the same despite the substantial rise in EC coarse grain. However, some shipments to the EC were transshipped to East

(Continued on page 12)

U.S. AGRICULTURAL EXPORTS: VALUE BY COMMODITY, JULY-MARCH 1970-71 AND 1971-72

Commodity	1970-71	1971-72	Change
	Million dollars	*Million dollars*	*Percent*
Animals and animal products:			
Dairy products	95	154	+62
Fats, oils, and greases	204	180	−12
Hides and skins	138	169	+22
Meats and meat products	106	118	+11
Poultry products	42	43	+2
Other	90	79	−12
Total	675	743	+10
Grains and preparations:			
Feedgrains, excluding products	919	789	−14
Rice	218	207	−5
Wheat and products	917	748	−18
Other	70	83	+19
Total	2,124	1,827	−14
Oilseeds and products:			
Cottonseed and soybean oils	208	214	+3
Soybeans	967	1,050	+9
Protein meal	296	316	+7
Other	79	93	+18
Total	1,550	1,673	+8
Other products and preparations:			
Cotton, excluding linters	340	432	+27
Tobacco, unmanufactured	441	471	+7
Fruits and preparations	254	272	+7
Nuts and preparations	54	68	+26
Vegetables and preparations	150	166	+11
Other	306	315	+3
Total	1,545	1,724	+12
Total exports	5,894	5,967	+1

Japan's Demand for Meal Shows Signs of Recovery

Above, a soybean extraction facility at Kōbe, Japan. Unrefined oil is shipped from here to other plants for refining into products for human consumption.
Left, a workman in a "tofu" factory slicing the soybean curd product. It will be taken to local shops where it will be sold to Japanese consumers.

Japanese imports of oilseeds and meals during the October 1971-February 1972 period signal some recovery in the growth of Japanese feed demand. Totaling 1.61 million metric tons, soybean meal equivalent, these imports were some 5 percent above the 1.53 million tons imported in the same 5 months of 1970-71.

Imports of soybeans and meal from the United States during this 5-month period amounted to 1.10 million tons, soybean meal equivalent, or 3.1 percent above the comparable 1970-71 period.

Total imports of oilseeds and meals during the 12 months ending September 30, 1971, however, had declined 3 percent below the 1969-70 import record of 3.42 million metric tons, soybean meal equivalent, and amounted to 3.31 million metric tons. This was the first decline in aggregate Japanese meal imports since 1967.

Despite the decline in aggregate imports in 1970-71, imports of soybeans and meal from the United States—virtually all of which were soybeans—increased 2 percent to a record 2.34 million tons. Imports of rapeseed and peanut meal also increased. These increases were, however, more than offset by reduced imports of fishmeal from Peru, soybeans from China, and smaller purchases of other vegetable and animal marine meals.

In spite of the 1970-71 decline, which reflected inventory adjustments and reduced livestock and poultry profitability due to increased feed prices, imports of oilseeds increased slightly and accounted for 89 percent of total imports compared with 85 percent in 1969-70, the balance representing imports of meals as such.

The significant reduction in meal imports as such took place despite liberalization of Japanese meal imports in the second half of 1971.

In 1971-72 a moderate recovery in Japanese feed demand is expected, reflecting anticipation of some reduction in mixed feed prices owing to revaluation.

—By Alan E. Holz
Fats and Oils Division, Foreign Agricultural Service

JAPAN'S IMPORTS OF OILSEEDS AND MEALS BY KIND[1]

Commodity	1969[2]		1970[2]	
	Total	Share of total	Total	Share of total
	1,000 metric tons	*Percent*	*1,000 metric tons*	*Percent*
Soybeans and meal:				
From U.S.	2,284	66.8	2,335	70.6
Other	263	7.7	206	6.2
Total	2,547	74.5	2,541	76.8
Other oilseeds and meals:	136	4.0	23	.7
Rapeseed & meal	131	3.8	152	4.6
Peanuts & meal	137	4.0	164	5.0
Other	466	13.7	429	12.9
Total	870	25.5	768	23.2
Total oilseeds	2,919	85.4	2,951	89.2
Total meals	498	14.6	358	10.8
Grand total	3,417	100.0	3,309	100.0

[1] Soybean meal equivalent basis. [2] Year beginning Oct. 1.

JAPAN'S IMPORTS OF OILSEEDS AND MEALS[1] BY MONTHS
[In thousands of metric tons]

Month	1969[2]		1970[2]		1971[2]	
	Soy[3]	Total[4]	Soy[3]	Total[4]	Soy[3]	Total[4]
October	124	232	226	328	249	351
November	178	239	208	287	193	296
December	211	282	214	336	237	345
January	218	298	208	287	209	296
February	214	304	215	289	216	325
March	168	277	216	292	—	—
April	168	287	191	262	—	—
May	211	327	149	202	—	—
June	210	293	181	254	—	—
July	190	290	175	239	—	—
August	173	266	167	258	—	—
September	219	322	185	275	—	—
Total	2,284	3,417	2,335	3,309	1,104	1,613

[1] Soybean meal equivalent basis. [2] Year beginning Oct. 1. [3] Imports of soybeans and meal from the United States. [4] All oilseeds and meals from all suppliers.

COFFEE RUST MENACES BRAZIL'S CHIEF EXPORT

PART I. How it began, what it is, and how chemical controls will work

By J. PHILLIP ROURK
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Foreign Agricultural Service

For the past 2 years—since January 1970—some of Brazil's major coffee-producing areas have suffered infections of *Hemileia vastatrix*, a fungus causing coffee rust. (See *Foreign Agriculture*, Aug. 17, 1970.)

It now seems that the fungus cannot be eliminated, although a measure of control can be achieved through the use of chemical fungicides. It is also possible to change growing methods and thereby facilitate control measures and thus improve chances of avoiding severe damage to coffee trees should they become infected.

Despite these measures, it is now apparent that coffee rust will sooner or later be epidemic in all or most of Brazil's coffee-producing regions, even those where it is not now apparent.

Because Brazil is the world's largest producer of coffee, the success or failure of its efforts to control the disease and to maintain a high level of production will attract the concerned interest of all in the coffee trade, as well as that of many consumers.

For this reason, *Foreign Agriculture* presents here the first of a two-part series that details the steps taken by the Brazilian Government to impede spread of the disease, to cultivate fungus-resistant varieties of coffee trees, to educate coffee growers to the seriousness of the coffee rust threat, and to publicize changes farmers must make in their growing techniques to provide the best chance possible to withstand future attacks by the parasite.

Credit for discovering the presence of *Hemileia vastatrix* in Brazil must go to Dr. Arnaldo Gomez Medeiros, a plant pathologist of Brazil's National Cocoa Institute. During a routine tour of cocoa plantations in the Atlantic coast State of Bahia in January 1970, Dr. Medeiros observed a number of coffee trees that were infected with what appeared to be coffee rust. This noxious fungus disease, long present in many parts of Asia and Africa, had not previously gained a firm foothold in the Western Hemisphere.

Since its discovery in Brazil's Bahia State, however, the disease has been found in other areas, appearing in the States of Espírito Santo, Minas Gerais, and São Paulo. Finally, in October 1971, it was discovered in Brazil's most important coffee-producing State, Paraná.

Since discovery of rust in Bahia some 2 years ago, countermeasures to control the disease, taken under the aegis of the Brazilian Coffee Institute (IBC), have gone through several phases.

Because first discoveries of infected trees were in isolated pockets containing relatively small numbers, it was believed that prompt action to cut down infected trees, burn the debris, and spray a substantial number of the surrounding trees with chemicals would be sufficient. It quickly became apparent, however, that eradication of the fungus was not possible, and soon additional areas of infection were located.

Up to April 1970, however, all fungus outbreaks were east of a north-south line between Belo Horizonte and Rio de Janeiro. It was felt that establishment of a phyto-sanitary zone approximately 30 miles wide and 235 miles long along this axis, and destruction of the few coffee trees within the zone might bring results fast enough to prevent spread of the disease to major coffee-producing areas to the west.

This sanitary zone was established but proved to be largely ineffectual.

Hope for eradication of the disease was abandoned as additional pockets of infection were found. A policy of severe pruning was instituted in the States of Bahia, Espírito Santo, and southern Minas Gerais. Unfortunately, this policy of containment also failed, and within a brief period the disease was found at a number of points west of the sanitary zone.

As more and more centers of infection were located over a sizable area of the country, it became apparent that the disease must have been present in Brazil for at least 4 or 5 years and had, unfortunately, not been recognized.

It is now generally accepted that coffee rust is in Brazil to stay and that it will inevitably continue to spread to every area of the country where coffee is grown. In fact, now that the disease has a foothold in the areas of intensive coffee cultivation in the States of São Paulo and Paraná, the pace of its further spread may be expected to accelerate.

Although the Brazilian coffee grower must learn to accept the fact that he will never again be free of the actual presence or the threat of rust on his farm, IBC officials believe there is no cause for panic or undue pessimism.

Proper use of equipment and technology now available can, they believe, insure that most farmers will probably be able to reduce the incidence of the disease to a level where economic production of coffee can be maintained. Admittedly, effective control of rust by means of chemical sprays will significantly increase the cost of coffee production, perhaps by as much as 20 to 30 percent. Farms with low productivity, or those located in areas of massive rust infection, will probably not survive. IBC officials also believe, however, that the urgent need to control rust will bring about a rapid and massive technological advance in the Brazilian coffee-producing industry to the point where those farmers achieving a high

Above, young Brazilian coffee trees just coming into production. Right, plant pathologist examines coffee tree showing signs of defoliation, the result of an attack by coffee rust.

level of productivity will not only survive, but prosper. Whether this will occur or not is, of course, of critical importance to the future of coffee in Brazil.

Nature of the disease. Even if rust does spread progressively throughout Brazil, the severity of the disease will not be uniform in all areas. The most important factors which bear on the intensity of the fungus attack are temperature, frequency and intensity of rainfall, luminosity, the quantity of inoculum, and leaf density.

Based on experimental work, it has been determined that the ideal temperature for the disease is slightly over 70° F., at which point a high percentage of spores germinate. The outer limits of temperature appear to be about 59° F. and 82° F. At the same time, however, spores will germinate on'y in the presence of water; hence, the importance of the frequency and intensity of rainfall.

Generally speaking, there are three phases in the cycle of the disease. The first is at the end of the dry season, when fungus is at a minimum stage of activity and there is no evidence of new infection. During the second phase, following the initiation of the rainy season, the spores again become active. They invade a larger number of leaves on the infected host tree, and they spread to adjacent trees, resulting in the normal evolution of the disease to its maximum intensity.

In the third stage, the disease undergoes a rapid decline occasioned by the fall of infected leaves. The interaction of this epidemiological curve with the rhythm of local temperature and rainfall patterns determines the course and severity of the infection.

The microclimate of the tree itself is also important. The traditional Brazilian system of planting four trees in one hole (cova), results in a dense "tree" with abundant foliage. Its lower branches touch the ground and intensify the warm, moist conditions suitable for the germination of spores.

Based on experiences in other countries, one might anticipate three degrees of severity of the disease in Brazil, depending on the length of the incubation period. A high risk of severe attacks of rust is present where the fungus incubation period is less than 20 days; a moderate risk of a severe attack exists where the incubation period is between 20 and 30 days; and there is only a slight risk of severe attack where the incubation period is over 30 days.

In a country as vast as Brazil, a great deal of effort will be required to amass the climatological data necessary to determine the degree of risk present in each of the country's coffee zones.

Because temperatures decline approximately 3° to 4° F. for each 1,000 feet of elevation above sea level, and because temperature is one of the key factors in the rust problem, it has been proposed that minimum planting elevations be established in each of the coffee areas as soon as pertinent data are available. It has also been recommended that no new coffee plantings of susceptible varieties be effected in areas where the incubation period for rust is less than 30 days.

Although this investigation by the section on Agricultural Climatology of the Agronomic Institute, Campinas, Brazil, is still incomplete, some tentative conclusions have been reached. For example, in the State of São Paulo it appears that susceptible varieties should not be planted at altitudes of less than 2,700 to 2,900 feet above sea level, depending on latitude.

In Paraná, it seems that planting below 2,300 feet would be subject to severe attacks while at an elevation above 3,000 feet, the risk from rust would become negligible.

A factor to be taken into account in this connection is that the two major coffee-producing States of Bra-

zil, São Paulo and Paraná, are located at the edge of the Tropic of Capricorn, rather than closer to the Equator. Thus, although average mean temperatures for the year are relatively low, the coincidence of the warmest weather and the rainy season during the months of October to March make this area a favorable one for the development and spread of the disease.

Although the findings are necessarily tentative at this stage, one knowledgeable observer has estimated that, based on a temperature/rainfall equation, it is possible that coffee rust may eventually become severe on 20 percent of Brazil's coffee-tree "population," but of insignificant importance on 30 percent. The remaining 50 percent would probably suffer attacks of moderate intensity which could become severe from time to time, depending on weather conditions and control measures taken.

Chemical controls. Despite the serious nature of the disease, *Hemileia vastatrix* can be controlled by means of chemical sprays. However, in areas where temperature and rainfall patterns are particularly favorable to the development of the disease, presently recommended types of fungicide spraying would be necessary at such frequent intervals as to render coffee growing uneconomical. It is essential, therefore, that future plantings of susceptible varieties be restricted to those areas where climatological conditions suggest only a slight probability of severe rust attack.

The timing and number of applications of spray materials, the fungicides giving most effective results, and the type of spraying equipment to be used are all matters that require careful consideration if rust is to be controlled. Since discovery of the disease in Brazil, various agencies of Brazilian Federal and State Governments, including the IBC, have been studying these questions.

Although conclusions reached thus far are tentative, it appears that from four to five applications per year will be required for effective control of rust in Brazil. Of the chemicals tested thus far, copper-based fungicides have shown the best results, not only in terms of reducing the incidence of infection, but also because they produce other, indirect beneficial effects on the coffee trees, resulting in higher production.

Insofar as quantity is concerned, it appears spraying might require about 4.5 pounds per acre of a fungicide containing 50 percent copper, for each application, with correspondingly greater amounts needed if the fungicide contains a lesser percentage of copper.

Various types of spray equipment have been, and are being, tested, including manual and motorized knapsack sprayers, larger horse- and tractor-drawn equipment, and even airplanes.

The latter are not effective because the chemical does not reach the underside of the leaf, where infection starts. Tractors cannot be used on many Brazilian coffee farms because the terrain is too steep. Motorized knapsack sprayers, though not economical on large farms, do offer the advantages of good penetration and distribution of the spray material. Good coverage of the underside of the leaf is essential to control because the stomata—through which the disease penetrates the leaf—are only on the lower side.

The timing of fungicide application is very important. In Brazil it is believed that the first application (considered the most important) should be made at the end of the dry season. The timing and frequency of subsequent applications would depend on the incidence of the disease before the first application and conditions during the rainy season. Fungicidal applications made at unsuitable times — besides being ineffective— could, in fact, cause an eventual increase in the intensity of the disease.

Important from the point of view of the farmer is the cost of effective rust control. It is impossible to be precise at this time, but it has been suggested that at current prices for coffee and fungicides, costs per hectare (2.47 acres) are equivalent to the value of three bags of coffee of 60 kilograms each (a total of nearly 400 lb. of coffee).

Because estimated average yields in Brazil are only about 455 pounds per acre, it is clear that only those farms with well above average yields will find it possible to adopt a spraying program for the chemical control of rust.

Yugoslavia Lowers Farm Import Tax

Effective March 2, 1972, Yugoslavia reduced the import tax from 6 to 2 percent of the total value on a selected list of 18 important agricultural commodities. Included in the list were vegetable oil, feedgrains, cotton, oilseed cakes and meal, hides, wool, sugar, and some type of vegetable fibers.

The official action was taken to soften prices of imported items to Yugoslav consumers. Following the two devaluations of the dinar in 1971, most imported items became more expensive. Thus, the reduction in the import tax will make it possible to keep retail prices within the limits prescribed by Yugoslavia's current stabilization policy.

Actually, the change only reduces a tax which originally was imposed in 1970 in an effort to improve Yugoslavia's balance of trade. Originally, the import tax of 5 percent was introduced in July 1970 as a temporary measure, due to expire on June 30, 1971. However, in January 1971, it was reduced to 2 percent, but extended until December 31, 1971. At that time, because of the rapidly increasing trade deficit, the tax rate was again increased—this time to 6 percent. On December 31, 1971, the 6 percent tax was prolonged until December 31, 1972. It is this "additional" 6 percent tax that is reduced to 2 percent by the new announcement.

In 1970, U.S. exports of agricultural products to Yugoslavia totaled $42 million: $18 million was oilcake, meal, and residues; nearly $15 million, soybean oil; $4.3 million, cow and horse hides; and $2 million, lard.

There were no shipments of U.S. cotton to Yugoslavia in either 1970 or 1971. The United States did ship $6.8 million worth of cotton to Yugoslavia in 1969 because the USSR, which has practically replaced the United States as Yugoslavia's major supplier, had a short crop.

CROPS AND MARKETS

SUGAR AND TROPICAL PRODUCTS

Malagasy Republic's 1971 Spice Exports

Exports of vanilla beans from the Malagasy Republic in 1971 totaled 1,160 metric tons valued at $12.8 million, down slightly from the record 1970 shipments of 1,218 tons valued at $13 million. Exports of black pepper also were smaller, totaling 1,434 tons compared with 2,227 tons in 1970.

Exports of cloves, however, rose by 42 percent to 7,496 tons valued at $20.6 million from 1970 shipments of 5,278 tons valued at $16.9 million. Cinnamon exports increased moderately to 694 tons from 630 tons in 1970.

The Malagasy Republic is the world's largest vanilla producer and exporter and the second largest in clove trade. The United States imported over $10 million worth of these spices from the Republic in 1971.

FAO Increases Estimates of World Cocoa Production and Consumption

At the Thirtieth Session of the United Nations FAO/CCP Subgroup on Statistics of the Intergovernmental Group on Cocoa held in Rome April 6-7, 1972, world cocoa bean production for the 1971-72 (October-September) season was estimated at 1,549,000 metric tons, up from the Group's November 1971 estimate of 1,500,000 tons.

Estimates of world grindings were also increased, with the 1972 annual grind now forecast at 1,494,000 tons. This compares with the November 1971 estimate of 1,467,000 tons.

TOBACCO

U.S. Tobacco Exports Decline in March

U.S. exports of unmanufactured tobacco declined in March 1972 after record high levels in January and February and heavy movements in December. Heavy shipments for those 3 months apparently cleared away the backlog which accumulated during the port strike of October and November 1971.

Unmanufactured tobacco exports for March were 28.6 million pounds, compared with 52.4 million in March 1971. This brings the total for the first 9 months of fiscal 1972 to 429.7 million pounds—2 percent above the comparable period of fiscal 1971. Smoking tobacco in bulk was 2.3 million pounds for March, bringing the total for the first 9 months of fiscal 1972 to 27.2 million, 19 percent above the comparable period of fiscal 1971.

The value of unmanufactured leaf exports was $438.7 million for July-March of fiscal 1972, up 6 percent from the $414.6 million shipped during the comparable period of the previous fiscal year.

The value of smoking tobacco in bulk exports, at $31.6 million, was up 19 percent from the comparable period of fiscal 1971.

The total value of all leaf and products exports for July-March fiscal 1972 was $622.9 million, up 11 percent from the $563.1 million exported during the comparable period of fiscal 1971.

U.S. EXPORTS OF UNMANUFACTURED TOBACCO[1]

Type	March		July-March		Change from
	1971	1972	1971[2]	1972[2,3]	1971
	1,000 pounds	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*Percent*
Flue-cured	40,731	18,013	321,416	302,701	−6
Burley	3,007	3,837	24,939	32,156	+29
Dark-fired Kentucky-Tennessee	2,113	2,005	14,767	19,156	+30
Virginia fire- and sun-cured	97	36	2,343	2,772	+18
Maryland	873	433	7,417	8,494	+15
Green River	40	15	426	224	−47
One Sucker	127	18	401	284	−29
Black Fat	256	388	2,139	2,162	+1
Cigar wrapper	65	187	943	2,215	+135
Cigar binder	10	5	303	67	−78
Cigar filler	14	135	234	323	+38
Other	5,019	3,509	47,720	59,136	+24
Total	52,352	28,581	423,048	429,690	+2
	Mil. dol.	*Mil. dol.*	*Mil. dol.*	*Mil. dol.*	*Percent*
Declared value	49.4	28.7	414.6	438.8	+6

[1] Export weight. [2] Fiscal year beginning July 1. [3] Preliminary. Bureau of the Census.

U.S. EXPORTS OF MANUFACTURED PRODUCTS[1]

Kind and quantity	March		July-March		Change from
	1971	1972	1971[2]	1972[2,3]	1971
	1,000 pounds	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*Percent*
Cigars and cheroots ... million pieces	3	3	45	47	+4
Cigarettes ...do...	2,381	2,577	21,265	25,871	+22
Chewing and snuff ... 1,000 pounds	1	2	28	24	−14
Smoking tobacco in packages 1,000 pounds	57	115	799	902	+13
Smoking tobacco in bulk ...do...	2,142	2,298	22,776	27,199	+19
Total declared value...million dollars	15.9	18.7	148.5	184.2	+24

[1] Export weight. [2] Fiscal year beginning July 1. [3] Preliminary. Bureau of the Census.

Rhodesian Tobacco Market Opens

The Rhodesian tobacco auction market opened April 20. The market again opened in secrecy for the seventh consecutive year since trade was embargoed by the United Nations following Rhodesia's unilateral declaration of independence in 1965.

The flue-cured crop is estimated at 143.2 million pounds, the largest crop since 1967. According to latest reports, this crop will be supported at a price of 34.5 U.S. cents per pound.

The burley crop will be sold under slightly less restricted conditions. Buyers will make their bids in open competition, but only growers, their wives, or farm managers may attend. The Government's goal for the 1971-72 burley crop was 15 million pounds. There are no production controls for the burley and there will be no Government price support for the first time since 1965.

Canadian Tobacco Industry Adopts Export Subsidy System

The Flue-cured Tobacco Growers Board of Canada has approved a new price system, including a method of subsidizing exports. The system includes a guaranteed price of 66.5 cents a pound for marketings based on a crop target of 200 million pounds and establishment of an incentive fund to encourage export sales.

Domestic manufacturers have agreed to pay guaranteed minimum average prices which would be effective up to a 210-million-pound total crop and would also pay an additional 1 cent per pound as a handling charge to the fund for export sales. The Board hopes the export subsidy fund will reach approximately $2 million this year.

GRAINS, FEEDS, PULSES, AND SEEDS

South African Corn Estimate Indicates Record Output

The second estimate (based on end-of-March conditions) of the South African corn crop is for a record production of 10.3 million tons compared to the previous record of 9.6 million harvested in 1967 and last season's crop of 8.6 million. The sorghum estimate is 640,000 tons compared to last year's 650,000 tons. While a corn crop this size, together with excess carryover stocks, will increase exportable supplies to about 5.7 million tons, inadequate rail facilities will likely limit corn exports to about 3 million tons.

International Wheat Agreement Governing Bodies To Meet in Tokyo

The Executive Committee of the International Wheat Council agreed at its meeting of March 29 to accept the invitation of the Government of Japan for the next meeting of the Council to be held in Tokyo. The meeting is scheduled for July 5-11, 1972. The Food Aid Committee will also meet in Tokyo on July 12.

The Council has not met outside of London since permanent headquarters were established there in the early 1950's.

Argentine Rice Not Being Offered for Export

Adverse weather affected large portions of Argentina's rice area, and has delayed harvesting of its main crop. With old-crop rice supplies nearly exhausted, strong demand, both internal and to cover forward export contracts, has raised prices to a point where they are not competitive in world markets.

Rotterdam Grain Prices and Levies

Current offer prices for imported grain at Rotterdam, the Netherlands, compared with a week earlier and a year ago:

Item	May 10	Change from previous week	A year ago
	Dol. per bu.	*Cents per bu.*	*Dol. per bu.*
Wheat:			
Canadian No. 1 CWRS-14	1.99	+1	[1] 1.90
USSR SKS-14	1.85	−3	1.90
Australian FAQ	([2])	([2])	1.82
U.S. No. 2 Dark Northern Spring:			
14 percent	1.89	−1	1.93
15 percent	1.97	−1	1.96
U.S. No. 2 Hard Winter:			
13.5 percent	1.82	+1	1.90
No. 3 Hard Amber Durum	1.84	0	1.80
Argentine	([2])	([2])	([2])
U.S. No. 2 Soft Red Winter	([2])	([2])	1.77
Feedgrains:			
U.S. No. 3 Yellow corn	1.47	0	1.63
Argentine Plate corn	1.73	−1	1.69
U.S. No. 2 sorghum	1.47	−1	1.42
Argentine-Granifero sorghum	1.48	−2	1.42
U.S. No. 3 Feed barley	1.19	−2	1.21
Soybeans:			
U.S. No. 2 Yellow	3.77	−5	3.29
EC import levies:			
Wheat [3]	[4] 1.99	+29	1.59
Corn [5]	[4] 1.30	+22	.88
Sorghum [5]	[4] 1.31	+24	1.00

[1] Manitoba No. 2. [2] Not quoted. [3] Durum has a separate levy. [4] Effective October 14, 1971, validity of licenses with levies fixed in advance is a maximum of 30 days. [5] Until Aug. 1, 1972, Italian levies are 19 cents a bu. lower than those of other EC countries.

Note: Basis—30- to 60-day delivery. Beginning May 9, 1972, the EC levy was increased because of the official devaluation of the dollar vis-a-vis the EC unit of account. The new exchange rate is one unit of account = US$1.0857. Prior to May 9, the dollar and unit of account were of equal value.

DAIRY AND POULTRY

Greek Poultry Meat Output Up In 1971, Imports Decline

Greek poultry meat consumption—mostly broilers—continued up in 1971; domestic production expanded, accounting for 96 percent of total supplies, while imports continued downward. These trends probably will continue in 1972.

Total meat production in calendar 1971 amounted to about 75,000 metric tons, an increase of about 13 percent compared to a year earlier. Most of the increase was in broilers.

During the year prices of other meats, especially beef, increased, while domestic poultry meat prices, under Government-enforced price ceilings, remained stable. Thus, poultry meat prices became progressively more attractive to consumers throughout the year.

Minimum import prices and high import levies discourage poultry meat imports and encourage domestic production. Higher consumer income and the expanding influx of foreign tourists also contribute to rising demand.

Frozen broiler imports, at 2,010 tons in 1971, were 41 percent below a year earlier. Imports from the United States dropped by 58 percent to 463 tons. Denmark supplied only 223 tons, a decline of 55 percent, finally dropping out of the market completely in late 1971. The Netherlands, however, made a recovery, supplying 370 tons compared with only 85 tons in 1970. France, Bulgaria, and Hungary were also important suppliers.

Netherlands Merger Creates EC's Largest Poultry Packer

Negotiations between the Netherlands cooperative poultry slaughterplants, Boxmeer GA in Boxmeer and Wezepe NV in Wezepe, both located in the southeastern part of the country, have led to the decision of total merger between the enterprises. The date of this merger is to be retroactive to January 1, 1971.

The name of the new enterprise is FRI-KI NV, with establishments in Boxmeer, Wezepe, Twello, Oosterwolde, Ruinen, and a sales office in Roermond. Before this merger, these establishments had already used the name of FRI-KI in their cooperative selling arrangements.

According to reports, FRI-KI may be regarded as the largest poultry processing enterprise in the European Community. Besides ready-to-cook, deep-frozen broilers, an important part of the production is turkeys, poultry parts, poultry specialties, and fresh broilers. The total number of people employed is about 1,750.

A 50-percent share in FRI-KI NV is in the hands of CEBECO in Rotterdam, a 25-percent share is vested in the cooperative LANDBOUWBELANG in Roermond, and the remaining 25 percent is in the name of the cooperative CEHAVE in Veghel.

Canada Announces 1972-73 Dairy Support Program

Canada's dairy policy for the 1972-73 (April 1-March 31) marketing year will permit a substantial increase in the base support level for manufacturing milk, according to a recent announcement by Canada's Minister of Agriculture. Although prices paid to producers for milk are a matter of provincial jurisdiction, the new program reportedly provides for an increase in the support price of approximately 20 cents or more per 100 pounds of milk.

The Canadian Dairy Commission has been authorized to pay a subsidy on manufacturing milk and cream, under its quota system, at the same rate as in the year just ending—$1.25 per 100 pounds of milk testing 3.5 percent butterfat, or 35.71 cents per pound of butterfat. The price at which the Commission offers to purchase skim milk powder, in support of the market price, has been increased to 29 cents per pound, or 3 cents per pound over the previous level.

There will be no change for the present in the Commission's purchase price of butter, which is 68 cents per pound, or of Cheddar cheese, which is 54 cents. The market price of Cheddar cheese has been well above the support level since last July. Emphasis in the program on skim milk powder is to provide a better balance between butter and cheese production and should avoid the possibility of an overproduction of cheese as well as a repetition of the butter shortage of last year.

The holdback from payments to producers to finance the cost of disposing of surplus dairy products, mainly skim milk powder, continues in force. Although the Canadian support price for powder is being raised, the holdback on each milk shipper's deliveries within his quota is being retained at the 1971-72 level of 10 cents per hundred pounds of milk. The holdback rate at last year's reduced level is possible because of the greatly improved export market price. There will be no holdback on cream deliveries within quotas.

The Commission's support prices for skim milk powder and Cheddar cheese were last increased in February, 1971. There was a previous upward adjustment in those prices last August, as well as in the butter price. As a result, a downward trend in milk production was arrested in the last quarter of 1971, and production is now on an upturn. The program for the coming year should consolidate that trend and ensure adequate supplies of dairy products for Canadian consumers.

French and British Dairy Farms Reach Marketing Agreement

One of the first major consequences of Great Britain's membership in the Common Market, reportedly, is that S.I.C.A. Ouest-Lait, a large dairy cooperative based in Normandy, and Unigate, Ltd., a U.K. firm, have reached a marketing agreement for distribution of butter in the United Kingdom. A joint communique indicated that this agreement "will help compensate for the progressive diminution of sources of supply from the Commonwealth."

S.I.C.A. Ouest-Lait will use the commercial network of Unigate, which includes some 460 stores, to distribute a limited quantity of butter. If the test of the market is favorable, deliveries will be increased next year and, in 1973, should reach some 10.2 million pounds and go beyond this figure in 1974. But in order for this to happen, it is necessary that British consumers like the quality of French butter and that the authorities in Brussels, according to the reported information, give large enough subsidies so that this butter can be competitive with butter the United States has been exporting to the United Kingdom since last year.

S.I.C.A. Ouest-Lait is also going to begin producing Cheddar and will export several thousand tons of it in 1973. An exchange of technicians between the two groups is contemplated. Meanwhile, Unigate is studying sales of certain products in France.

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Foreign Agriculture

Record U.S. Farm Exports (Continued from page 4)

European countries from both Germany and the Netherlands. Corn production in Argentina fell this year by 4 million tons. In the coming months, more countries are expected to buy feedgrains from the United States because available supplies from other sources will be smaller.

Animals and products. U.S exports rose one-tenth to $743 million. Increased sales of butter, cattle hides, and variety meats pushed the export volume up 17 percent. However, shipments of slaughter cattle to Canada and tallow to Japan fell short of last year's levels. Last year, Canada imported large numbers of slaughter cattle when limited herd expansion minimized its own availability. This year, cattle for slaughter in Canada are more plentiful and the need to import from the United States has diminished.

Exports of dairy products increased three-fifths to $154 million. Sharp expansion in butter shipments principally to the United Kingdom accounted for nearly all the gain. Butter has been relatively scarce in the United Kingdom for 2 years since dairy production in New Zealand declined as a result of drought. In addition, stocks and production in Europe also have descended from the surplus levels of a few years ago. The large EC surplus was reduced by subsidizing exports, disposing of butter at cutrate prices to institutions and food processors, and paying premiums to dairymen for slaughtering dairy cattle. U.S. butter exports in July 1971-March 1972 totaled 119 million pounds, compared with only 7 million in all of 1970-71. However, some of this gain has been offset by a slowdown in nonfat dry milk sales under Government-financed programs.

Exports of animal fats and oils have declined slightly. Most of the decline can be traced to reduced shipments to Japan because of the strikes. Shipments of lard to the United Kingdom also have declined because of expanded pork production in Europe.

Exports of beef and variety meats, on the other hand, have expanded. Demand for U.S. beef has increased sharply as a result of tourist trade in the Caribbean, Europe, and Asia. In addition, large supplies of variety meats at attractive prices have encouraged sales of these items to European countries.

U.S. sales of poultry products remained about the same as a year ago. Competition in world markets from subsidized products is very keen, and in addition, many countries have severe restrictions on imports of poultry meat which limit the marketing of U.S. products, despite their high quality and competitive prices.

Exports of hides and skins, including fur skins, have risen sharply in recent months to about $30 million above shipments in the same period a year ago. Most of the increase was attributed to a shortage of supplies available from other sources, especially Argentina. Larger shipments went to Western Europe and Japan. Mexico is a good market for U.S. cattle hides. Cattle hides, alone, accounted for 64 percent of total U.S. exports. The unit value of cattle hides rose to $8.70 from $7.91 a year earlier.

Fruits and vegetables. Exports were 8 percent higher than the $405-million level of last year. The increases occurred mainly in shipments of fresh fruits and vegetables, fruit juices, and hops. Substantial rises were recorded in exports of fresh fruits to Canada—the top U.S. market—Western Europe, and Japan.

Because of its small crop in 1971, Western Europe provided a large market for U.S. hops. U.S. exports totaled $16 million, compared with only about $10 million last year, making the United States a net exporter of hops. The major markets for U.S. hops are West Germany, Brazil, Canada, Czechoslovakia, Yugoslavia, Belgium, and Japan.

The recent liberalization of grapefruit imports by Japan has contributed significantly to the expansion of U.S. sales there. Fresh grapefruits shipped to Japan in the July-March period totaled $7 million compared with less than $1 million in the same period last year, when exports were severely restricted by quotas.

Since 1969, nuts and preparations have developed into an important growth item in U.S. exports. In 1969, exports of nuts totaled only $25 million; by 1970-71 this figure had jumped to $68 million. Shipments of nuts in July 1971-March 1972, at $68 million, were about 24 percent ahead of shipments in the same period last year. Most of the growth has been in almonds, which accounted for about two-thirds of total exports. Innovations in production and harvesting of almonds have thrust the United States into first place in world almond output and sales. However, exports of walnuts also have expanded in the last 9 months.